

CLAIMS

What is claimed is:

1 1. A method for a dynamic information connection engine, comprising:
2 detecting at least one user action on at least one client computer and, in response,
3 determining at least one user is searching for supported information;
4 extracting query information from the at least one user action, wherein the query
5 information includes at least one category of the supported information;
6 automatically selecting at least one supplier of the supported information using at least
7 one server in response to the query information;
8 transferring at least one query including the query information among the selected at
9 least one supplier via at least one network; and
10 generating at least one result list in response to at least one query response, wherein
11 the at least one result list includes response information generated from the at least one query
12 response and query status information.

1 2. The method of claim 1, further comprising providing the at least one result list to the
2 at least one user.

1 3. The method of claim 1, wherein the at least one result list further includes at least one
2 electronic link to the selected at least one supplier.

1 4. The method of claim 1, wherein detecting further comprises:

2 monitoring the at least one user action by capturing Uniform Resource Locators
3 (URLs) from a browser of the at least one client computer;
4 comparing a root portion of the captured URL with at least one list of strings stored by
5 the at least one client computer; and
6 forwarding a root-matching URL to the at least one server, wherein determinations are
7 made whether the at least one user action is a request for travel information and whether the at
8 least one user action contains enough information to be the at least one itinerary component.

1 5. The method of claim 1, further comprising establishing at least one coupling to the
2 selected at least one supplier via the at least one network, wherein establishing includes at
3 least one method selected from a group consisting of requesting at least one web page from at
4 least one web site of the at least one supplier, and using at least one proprietary coupling
5 among the at least one supplier and at least one intermediary database, wherein the at least
6 one intermediary database comprises information on available inventory of the at least one
7 supplier.

1 6. The method of claim 1, further comprising establishing at least one coupling between
2 the at least one client computer and the at least one server, wherein the at least one client
3 computer dynamically constructs a name of the at least one server by concatenating string
4 fragments including a string constant representing a fixed base part of a name of the at least
5 one server, at least one random number converted into at least one character string, and a
6 string constant representing at least one domain in which the at least one server is located.

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7. The method of claim 1, further comprising:
tracking a purchase of at least one itinerary component; and
maintaining proof of the purchase.

8. The method of claim 7, wherein the tracking and the maintaining comprise
maintaining at least one buy-tracking list of string pairs on the at least one client computer,
wherein a first string pair element includes a URL of a receipt web page of the at least one
supplier, wherein a second string pair element includes an extraction specifier that specifies a
purchase transaction identification string within the receipt web page, and wherein the
purchase transaction identification string is used as proof of purchase transaction origination.

9. The method of claim 1, wherein automatically selecting at least one supplier
comprises performing at least one evaluation using at least one search factor selected from a
group consisting of information from the at least one itinerary component, preferences of the
at least one user, personal information on the at least one user, at least one previous search
history of the at least one supplier, and at least one search history of at least one search of a
similar type and by a similar user.

10. The method of claim 1, further comprising filtering the at least one query response
using criteria selected from a group consisting of relative item pricing, preferences of the at
least one user, personal information on the at least one user, sort criteria of the at least one
user, past purchasing decisions of the at least one user, and past purchasing decisions of at
least one aggregate group of users.

1 11. A method for locating and scheduling travel itinerary components in real time,
2 comprising:
3 detecting at least one user action on at least one client computer and, in response,
4 determining at least one user is searching for travel information;
5 extracting at least one itinerary component from the at least one user action;
6 automatically selecting at least one supplier of the at least one itinerary component
7 using at least one server;
8 transferring at least one query among the selected at least one supplier via at least one
9 network, wherein the at least one query is a request for purchase information on the at least
10 one itinerary component; and
11 presenting the at least one user with at least one result list in response to at least one
12 query response, wherein the at least one result list includes the purchase information, at least
13 one electronic link to the at least one supplier, and query status information.

1 12. The method of claim 11, wherein the at least one itinerary component comprises at
2 least one component selected from a group consisting of airline reservations, lodging
3 reservations, and ground transportation reservations.

1 13. The method of claim 11, wherein detecting at least one user action further comprises:
2 monitoring the at least one user action by capturing Uniform Resource Locators
3 (URLs) from a browser of the at least one client computer;
4 comparing a root portion of the captured URL with at least one list of strings stored by
5 the at least one client computer; and

forwarding a root-matching URL to the at least one server, wherein determinations are made whether the at least one user action is a request for travel information and whether the at least one user action contains enough information to be the at least one itinerary component.

14. The method of claim 13, further comprising determining whether the at least one user action contains enough information to be the at least one itinerary component.

15. The method of claim 14, further comprising opening at least one sub-window on the browser when the at least one user action includes enough information to be the at least one itinerary, wherein the sub-window accepts entry of the at least one itinerary.

16. The method of claim 14, further comprising capturing information from the at least one user action when it is determined that the at least one user action contains enough information to be the at least one itinerary component.

17. The method of claim 14, further comprising capturing information from a third party web site when it is determined that the at least one user action contains enough information to be the at least one itinerary component.

18. The method of claim 13, further comprising updating the at least one list of strings, wherein updating includes transferring at least one updated list of strings from the at least one server.

1 23. The method of claim 22, wherein the at least one electronic site is selected from a
2 group consisting of at least one supplier web site, at least one captive purchase web site, and
3 at least one third party web site.

1 24. The method of claim 11, further comprising:
2 tracking a purchase of the at least one itinerary component; and
3 maintaining proof of the purchase.

1 25. The method of claim 24, wherein the tracking and the maintaining comprise
2 maintaining at least one buy-tracking list of string pairs on the at least one client computer,
3 wherein a first string pair element includes a URL of a receipt web page of the at least one
4 supplier, wherein a second string pair element includes an extraction specifier that specifies a
5 purchase transaction identification string within the receipt web page, and wherein the
6 purchase transaction identification string is used as proof of purchase transaction origination.

1 26. The method of claim 11, wherein automatically selecting at least one supplier
2 comprises performing at least one evaluation using at least one search factor selected from a
3 group consisting of information from the at least one itinerary component, preferences of the
4 at least one user, personal information on the at least one user, at least one previous search
5 history of the at least one supplier, and at least one search history of at least one search of a
6 similar type and by a similar user.

1 27. The method of claim 11, further comprising filtering the at least one query response
2 using criteria selected from a group consisting of relative item pricing, preferences of the at
3 least one user, personal information on the at least one user, sort criteria of the at least one
4 user, past purchasing decisions of the at least one user, and past purchasing decisions of at
5 least one aggregate group of users.

1 28. The method of claim 11, further comprising sorting the at least one list using at least
2 one sorting criteria from the at least one user.

1 29. The method of claim 28, wherein the sorting is performed on the at least one client
2 computer.

1 30. The method of claim 11, further comprising:
2 generating at least one travel request object in response to the extracted at least one
3 itinerary component, wherein the at least one travel request object contains information on the
4 at least one itinerary component and identifying information for the selected at least one
5 supplier; and
6 optimizing the at least one travel request object.

1 31. The method of claim 11, further comprising tracking at least one time period selected
2 from a group consisting of session periods, itinerary search time periods, result expiration
3 time periods, and at least one travel category search result time period.

1 32. The method of claim 11, further comprising providing at least one user identification
2 number and at least one session identification number to the at least one server.

1 33. The method of claim 11, further comprising maintaining at least one travel-special
2 inventory for the at least one supplier, wherein the at least one travel-special inventory is a
3 current inventory of special deals on travel.

1 34. The method of claim 11, wherein the query status information comprises a total
2 number of travel suppliers to which the at least one query is transferred, a total number of
3 travel supplier responses received, a total number of data items found, a total number of data
4 items processed, and a total number of data items presented to the at least one user.

1 35. The method of claim 11, further comprising presenting the at least one user with at
2 least one electronic link corresponding to each item of the at least one result list, wherein the
3 at least one electronic link directs the at least one client computer to at least one page of a web
4 site from which the item can be purchased.

1 36. The method of claim 35, wherein the web site is a supplier web site.

1 37. The method of claim 35, wherein the web site is affiliated with the at least one server.

1 38. The method of claim 11, wherein the at least one client computer comprises at least
2 one processing device selected from a group consisting of personal computers, personal

3 digital assistants, hand-held computers, cellular telephones, communication devices, and
4 vehicle telematic systems.

1 39. The method of claim 11, wherein the at least one network comprises the Internet.

1 40. A system for locating and scheduling travel itinerary components in real time,
2 comprising:

3 at least one client computer that detects at least one user action and determines
4 whether at least one user is searching for travel information;

5 at least one server coupled to the at least one client computer, wherein at least one
6 itinerary component is extracted from the at least one user action, wherein at least one
7 supplier of the at least one itinerary component is automatically selected, wherein at least one
8 query is transferred among the selected at least one supplier via at least one network, wherein
9 the at least one query is a request for purchase information on the at least one itinerary
10 component, wherein the at least one user is presented with at least one result list in response
11 to at least one query response, wherein the at least one result list includes the purchase
12 information, query status information, and at least one electronic link that supports purchase
13 of the at least one itinerary component.

1 41. The system of claim 40, wherein the at least one travel component comprises at least
2 one component selected from a group consisting of airline reservations, lodging reservations,
3 and ground transportation reservations.

1 42. The system of claim 40, wherein detecting at least one user action further comprises:
2 monitoring the at least one user action by capturing Uniform Resource Locators
3 (URLs) from a browser of the at least one client computer;
4 comparing a root portion of the captured URL with at least one list of strings stored by
5 the at least one client computer; and
6 forwarding a root-matching URL to the at least one server, wherein determinations are
7 made whether the at least one user action is a request for travel information and whether the at
8 least one user action contains enough information to be the at least one itinerary component.

1 43. The system of claim 42, wherein the at least one client computer comprises at least
2 one browser sub-window that is opened when the at least one user action includes enough
3 information to be the at least one itinerary, wherein the sub-window accepts entry of the at
4 least one itinerary component.

1 44. The system of claim 42, wherein information is captured from the at least one user
2 action, and it is determined that the at least one user action contains enough information to be
3 the at least one itinerary component.

1 45. The system of claim 40, wherein the at least one itinerary component is received from
2 at least one location selected from a group consisting of the at least one client computer.

1 46. The system of claim 40, wherein at least one coupling is established to the selected at
2 least one supplier via the at least one network, wherein the establishment includes at least one

3 detecting at least one user action on at least one client computer and, in response,
4 determining at least one user is searching for supported information;
5 extracting query information from the at least one user action, wherein the query
6 information includes at least one category of the supported information;
7 automatically selecting at least one supplier of the supported information using at least
8 one server in response to the query information;
9 transferring at least one query including the query information among the selected at
10 least one supplier via at least one network; and
11 generating at least one result list in response to at least one query response, wherein
12 the at least one result list includes response information generated from the at least one query
13 response and query status information.

62. A method for locating and scheduling travel itinerary components in real time,
comprising:
3 detecting at least one user action on at least one client computer and, in response,
4 determining at least one user is searching for travel information;
5 extracting at least one itinerary component from the at least one user action;
6 automatically selecting at least one supplier of the at least one itinerary component
7 using at least one server;
8 transferring at least one query among the selected at least one supplier via at least one
9 network, wherein the at least one query is a request for purchase information on the at least
10 one itinerary component;

